

REMARKS

This is in response to the Office Action dated March 23, 2007. A request for a one month extension of time and the required fee are submitted herewith.

Applicant confirms the election of Species 1. This election is made with traverse. The Examiner has failed to offer any support for the assertion that it would be a serious burden for the Examiner to examine all of the presented claims. At the very least the Examiner must identify the classes and subclasses which must be searched for each of the asserted species and show that separate fields must be searched for each species. MPEP § 803. Reconsideration and withdrawal of the restriction requirement are respectfully requested.

The Examiner has rejected all of the elected claims under Section 103 citing a combination of Gerep (5,107,798) and Coe (3,313,339) or that combination in view of Wydra et al. (6,440,449). To establish a prima facie case of obviousness, three basic criteria must be met. "First, there must be some suggestion or motivation, in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." MPEP § 2142. "Second, there must be a reasonable expectation of success." *Id.* "Finally, the prior art reference (or references when combined) must teach or suggest all the claimed limitations." *Id.* "The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." *Id.*

Gerep discloses and claims a boiler stud having a cylindrical metal core and a cylindrical sleeve of a different material. He also discloses a recovery boiler in which such studs are attached to the water carrying tubes which form the boiler wall. The studs are illustrated in

Figures 3, 4, 5, 7A and 7B. As the Examiner has recognized, the top of the studs is flat. There are no projections extending from the top of any stud as required by the claims of the present application. The Gerep patent, at column 8, lines 18-21, says, 'The core 52 is of a material having a thermal conductivity sufficient to provide proper heat transfer to the boiler tube during operation.' Given this teaching there is nothing in the reference to suggest any modification of the stud disclosed by Gerep. Indeed, the teaching is that the stud will do the job without modification.

Coe discloses a heat transfer device having a square flat base plate 11 supporting upwardly extending fins 12. The central portion of the base plate and the inside edges of the fin define a volume for accommodating a semiconductor device to be cooled. Col. 1, lines 28-31 and 43-50. This device is analogous to the boiler tube wall having studs extending from the wall. In both devices heat is transferred by the fins or studs from the air adjacent the fin or stud.

The Examiner has combined Coe with Gerep to attach the heat transfer device of Coe onto the flat top of the stud disclosed by Gerep. Yet, there is no teaching or suggestion in either reference to make the combination. Absent the teaching by applicant in the present application one skilled in the art is no more likely to place the square heat transfer apparatus of Coe on the round top of Gerep's stud than one is likely to place a square peg in a round hole.

The Examiner asserts that one skilled in the art would combine Coe with Gerep "to provide more protection and longevity to the studs." But, there is no discussion in Coe that the fins provide protection or increase longevity of the base plate or any other structure to which they are attached. The disclosure that the projections minimize stress at the tip of the stud overcoming the accelerated wear problem with the prior art can only be found in applicant's

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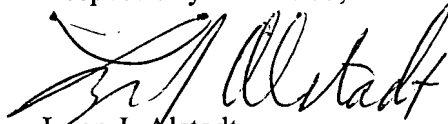
disclosure at page 5. But, it is wrong to use applicant's disclosure "as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the results of [applicants'] claims. * * Monday morning quarterbacking is quite improper when resolving the question of nonobviousness..." Orthopedic Equipment Co., Inc. et al. v. United States, 702 F.2d 1005, 1012; 217 USPQ 193, 199 (Fed. Cir., 1983). Yet, this is exactly what the Examiner has done in combining Gerep and Coe to reject applicant's claims.

Wydra et al. disclose a method for applying a diffusion coating to gas turbine components made from a nickel or cobalt base alloy. There is no discussion of studs or boilers or heat transfer. The patent has no drawings. Consequently, there is no teaching or motivation in Wydra to provide projections on the end of a stud.

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None of the references alone or in combination teach or support a stud having projections extending from the top of the stud as required by the pending claims. Accordingly, the claims are patentable. Reconsideration, allowance and rejoinder of the non-elected claims are respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Lynn J. Alstadt", written in a cursive style.

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